

# Megabyte Rigging Manual

This manual can also be printed off the Internet at [Megabyteclass.org](http://Megabyteclass.org)

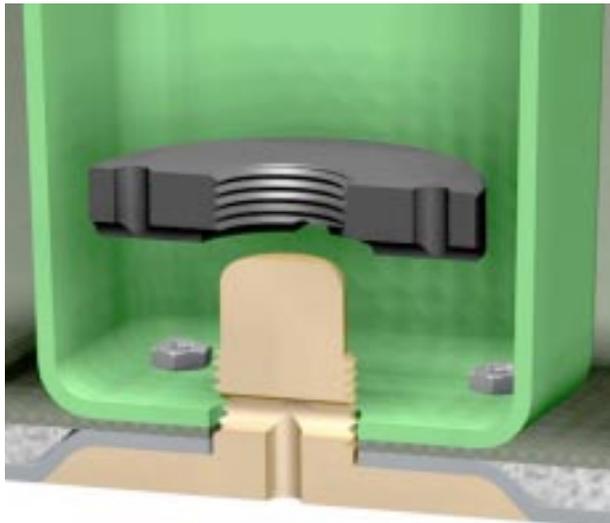
The first step in rigging your boat is the assembly of the mast but first a word of caution. The spar is a glass fibre carbon fibre composite and needs to be handled with more care than an aluminum spar. Avoid banging, denting or chipping and look after it for what it is - very strong but easily damaged.



## Mast Assembly

Assemble the topmast into the lower, lining up the tracks using the two tabs. Undo the halyard bundle and take both the end of the rope halyard and the shackle down to the gooseneck area. Caution: Do not pull the wire-to-rope splice through the sheave or you will have difficulty hoisting the sail. The splice should remain below the halyard lock.

Examine the mast cavity and note that, at the bottom, there is a round boss extending above a large, flat, plastic washer. Use your hand to familiarize yourself. The hole in the bottom of the mast plug must go over the boss and ride on the plastic washer. This way your mast will never touch the side or wear the bottom of the mast cavity as it will pivot solely on the boss. Insert the mast into the cavity and move the base around until it drops over the boss, rotates freely, and there is no more side to side or fore and aft movement at the bottom of the mast.



## About the mast step.

Your Megabyte has a unique mast step that is actually connected to the water under the boat! This means that no water stays in the cavity above the height of the waterline while sailing and the cavity drains completely when stored on shore. Rain water will actually flush out any dirt as will the movement of the water in the mast step while the boat is sailing (about 1"-2").

The bottom of the mast cavity and the hull structure are glued together with plexus and then through bolted with the bolts holding in the plate. Below is a cutaway showing the plastic washer unscrewed. There are channels in the washer allowing the water to reach an access hole across the boss which in turn is connected to a drain hole to the outside. The base of the mast and the plastic washer are self lubricating. If you sail in salt water and are hosing off the boat with fresh water, hose down the mast cavity as well!

## The Sail

The sail is delivered folded from the sailmaker for ease of handling. This has done no damage to the sail but repeated folding, particularly on the same fold, can eventually fatigue the laminate. We suggest that it be folded at the top batten, leech to

leech, and then rolled down to the foot and stored rolled. Spread the sail out over the cockpit and insert the battens. The bottom



three battens insert through the slit in the batten pocket until they come up against an elastic at the front of the pocket. Force them further into the pocket then tuck the back end of the batten under the flap and release. The elastic will force the batten out against the leech.



The top batten is a "full length" batten and does not have any elastic at the front end. Instead there is a

batten pocket protector screwed onto the sail from both sides. Be sure that the batten is all the way into the protector. If it is not, the batten will come right through the pocket the first time you sail with it. Any damage caused this way is obvious and not covered by warranty.



At the back end of the batten, pass the webbing over the batten and through the buckle as shown and tighten until snug. Do not overtighten or you will induce too much bend in the batten and the sail will be too full in light air.

Hoisting the sail will be a little hard the first few times. It helps if the boltrope at the head of the sail is lubricated with a silicone lubricant or spray as this will carry the lubricant up the track. Feed the sail into the track and attach the halyard. Do not



attach the boom as it will make hoisting that much more difficult. Note below that, as the sail nears the



top, the angle at which the halyard pulls gets close to 45° which makes the last few inches of hoisting quite hard. Make sure you pull the halyard from about 3-4 ft. in front of the mast



so that the ball goes through the opening in the lock without hitting the top of the fitting. Properly locked, it looks like the photo above.

### **Outhaul**

Pass the end of the boom right through the permanent loop at the clew and then attach the hook block to the grommet. Tip: Put a temporary



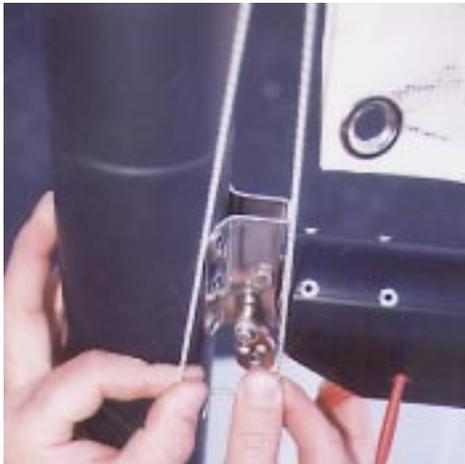
knot in the line to keep the sail out near the end of the boom. Slide the front end of the boom over the gooseneck pin as shown below then remove the balls and thread the two



ends of the outhaul rope through the small blocks on the gooseneck and down to the TOP mini blocks which are attached on each side of the spar at the lower fitting. See below. From there, take them back to the TOP clamcleat on the deck and reattach the balls. Undo the temporary knot at the end of the boom and this completes the outhaul. Attached to the wire loop at the



bottom of the halyard you will find a small bungee loop. Hook this around the small plastic standoff between



the head of the bolt and the cheek block on the starboard side of the gooseneck. This will keep the halyard from swinging loose. Bunch up the halyard (if you don't coil it, the



rope won't be kinked when you want to lower the sail) and stuff it in the pocket provided. Pull the bungee around the mast and hook to the



opposite side of the boom. This will prevent the boom crashing to the deck when you lower the sail! Tie the tack to the mast so that the sail is the same distance behind the mast as it is where it comes out of the track above. You should check this distance after pulling the outhaul tight.

### **Cunningham**

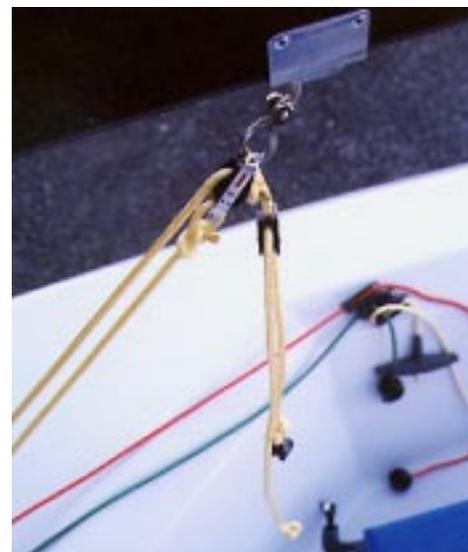
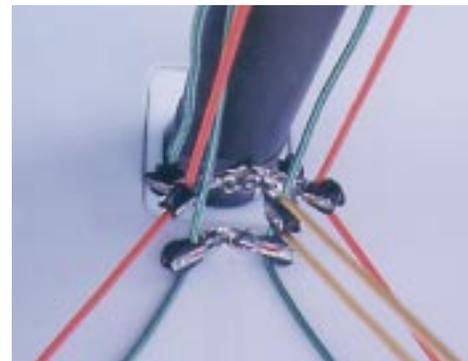
Start the first part of the cunningham in the bottom cleat one side of the deck, pass it through one of the blocks **on the deck**, through the block on the end of the second part of the cunningham then back down to the deck, through the other block on the deck then back to the bottom cleat on the opposite side deck. The second part goes up through the hook block, which is hooked into the upper grommet, as shown, and the



end (being held in the previous photo) is left untied until after the vang is installed.

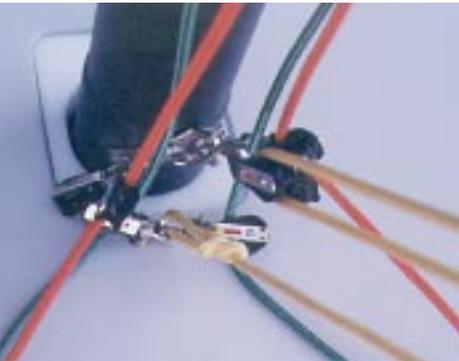
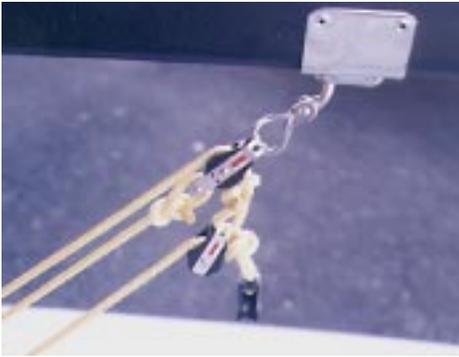
### **Vang**

The Vang, or Kicker, is a 12:1 cascading system in three parts. The mini blocks are already strung when the boat is shipped. Attach the twist shackle and single block to the eye on the lower mast fitting as below.

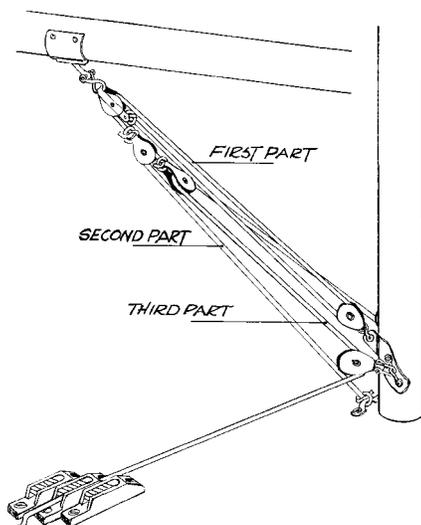


Attach the single block with becket, twist shackle and vang key into the slot of the boom key plate. That finishes the first part - the second part is shown hanging above. One

end is attached to a block, the other end is free. Attach the free end of the line (bottom line below) to the strap

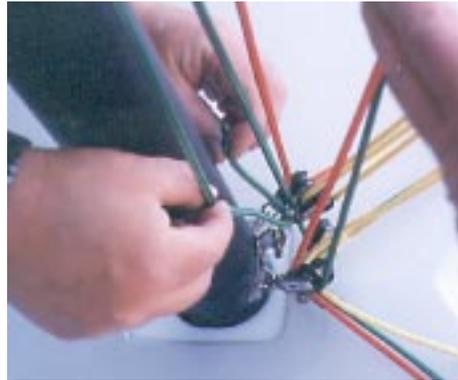


mounted on the deck behind the mast, tying it off between the cunningham blocks as above. The third part of the vang is the deck control line. It starts in the middle side deck clam cleat, goes forward to the remaining free block UNDER the outhaul line then up to the block on part two (the free block in the top picture), then back down repeating the pattern to the opposite side deck. The drawing shows the vang system without any other lines.

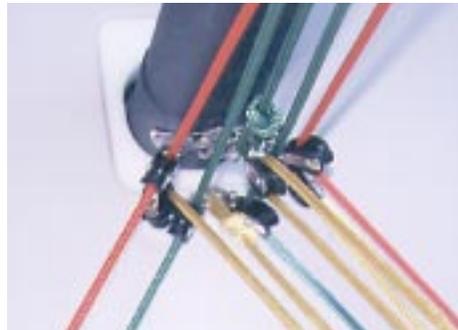


**Complete the cunningham**

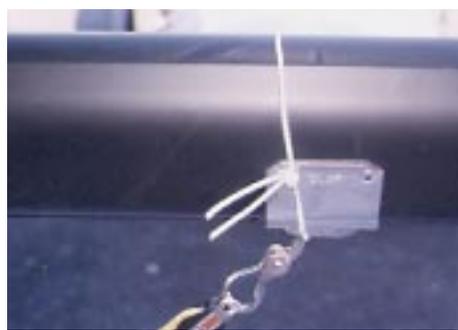
Tie the line coming down from the Cunningham hook to the twist shackle holding the first part of the vang to the lower mast fitting.



When fully rigged, the control lines will appear as below.



Slip the bungee loop up against the vang key to stop it falling out when close hauled.



Control cleats should be set up with outhaul on top, vang in the middle and cunningham in the bottom.



**Main sheet**

The main should be rigged as shown except that in light air the line can be taken off the top block and tied to the top pulley of the lower block for less purchase and faster trimming.



**Hiking straps**

There is a knot under the central hiking straps that can be loosened and moved in or out depending on how far in you want the strap to lie when not in use, i.e. for tacking.



Be sure to check all knots!!  
Good Sailing!

